

IN THE CLAIMS:

The status of each claim that has been introduced in the above-referenced application is identified in the ensuing listing of the claims. This listing of the claims replaces all previously submitted claims listings.

1. (Currently amended) A method for fabricating an interposer, comprising:
providing at least one interposer; and
fabricating at least one fence configured for placement on a surface of ~~said~~ the at least one interposer, ~~said~~ the at least one fence including a receptacle configured to receive at least one semiconductor device so as to align ~~said~~ discrete conductive elements protruding therefrom with corresponding contact pads at ~~said~~ the surface of ~~said~~ the at least one interposer, ~~said~~ the fabricating including:
at least partially, selectively consolidating unconsolidated material to form a first portion of ~~said~~ the at least one fence; and
repeating ~~said~~ the at least partially consolidating at least once to form at least one additional portion of ~~said~~ the at least one fence.
2. (Currently amended) The method of claim 1, further comprising securing other discrete conductive elements to contact pads at an opposite surface of ~~said~~ the at least one interposer and in communication with ~~said~~ the contact pads at ~~said~~ the surface of the at least one interposer.
3. (Currently amended) The method of claim 2, wherein ~~said~~ securing other discrete conductive structures elements comprises disposing solder bumps on ~~said~~ the other contact pads.
4. (Currently amended) The method of claim 2, wherein ~~said~~ securing other discrete conductive structures elements comprises securing at least one of conductive balls, conductive bumps, conductive pillars, and Z-axis adhesive film to ~~said~~ the other contact pads.

5. (Currently amended) The method of claim 1, further comprising:
placing or forming a protective layer over at least a portion of at least one of ~~said~~ a top surface and ~~said~~ the surface and an opposite surface of ~~said~~ the at least one interposer, with the contact pads of ~~said~~ the at least one interposer being exposed through ~~said~~ the protective layer.
6. (Currently amended) The method of claim 1, wherein ~~said~~ fabricating ~~said~~ the at least one fence includes disposing a portion of ~~said~~ the at least one fence over at least one peripheral edge of ~~said~~ the at least one interposer.
7. (Currently amended) The method of claim 1, wherein ~~said~~ fabricating ~~said~~ the at least one fence comprises fabricating at least one fence having a receptacle configured to progressively guide ~~said~~ the at least one semiconductor device into alignment with ~~said~~ the at least one interposer upon assembly of ~~said~~ the at least one semiconductor device and ~~said~~ the at least one interposer.
8. (Currently amended) The method of claim 1, wherein ~~said~~ fabricating ~~said~~ the at least one fence comprises fabricating ~~said~~ the at least one fence on ~~said~~ the surface of ~~said~~ the at least one interposer.
9. (Currently amended) The method of claim 8, wherein ~~said~~ fabricating ~~said~~ the at least one fence comprises fabricating ~~said~~ the at least one fence from a photopolymer.
10. (Currently amended) The method of claim 1, wherein ~~said~~ fabricating comprises:
placing ~~said~~ the at least one interposer in a first orientation;
determining an envelope defining limits of inner and outer surfaces of ~~said~~ the at least one fence;
and

forming at least a portion of ~~said~~ the at least one fence as a series of superimposed, contiguous, mutually adhered layers of material commencing at a defined limit of ~~said~~ the at least one fence.

11. (Currently amended) The method of claim 10, further comprising:
inverting ~~said~~ the at least one interposer to a second orientation; and
forming additional portions of ~~said~~ the at least one fence as a series of superimposed, contiguous, mutually adhered layers of material.

12. (Currently amended) The method of claim 11, wherein ~~said~~ forming additional portions comprises adhering ~~said~~ the additional portions to ~~said~~ the at least one fence.

13. (Currently amended) The method of claim 1, wherein ~~said~~ at least partially, selectively consolidating is effected by directing a focused beam of radiation onto a surface of ~~said~~ selected regions of ~~said~~ layer, the unconsolidated material.

14. (Currently amended) The method of claim 8, wherein ~~said~~ fabricating ~~said~~ the at least one fence comprises molding ~~said~~ the at least one fence onto ~~said~~ the at least one interposer.

15. (Currently amended) The method of claim 1, wherein ~~said~~ the at least one fence comprises at least one prefabricated fence and further comprising securing ~~said~~ the at least one prefabricated fence to ~~said~~ the at least one interposer.

16. (Currently amended) The method of claim 1, wherein ~~said~~ fabricating ~~said~~ the at least one fence comprises forming a plurality of superimposed, contiguous, mutually adhered layers comprising at least partially consolidated material.

17. (Currently amended) The method of claim 1, wherein ~~said~~ providing at least one interposer comprises providing a substrate including a plurality of smaller interposers thereon.

18. (Currently amended) The method of claim 1, wherein ~~said~~ providing at least one interposer comprises providing a plurality of individual interposers.

19. (Currently amended) The method of claim 1, wherein ~~said~~ providing at least one interposer comprises providing a single interposer.

20. (Currently amended) A method for fabricating an interposer, comprising:
providing at least one interposer; and
fabricating at least one fence configured for placement on a surface of ~~said~~ the at least one interposer, ~~said~~ the at least one fence including a receptacle configured to receive at least one semiconductor device so as to align ~~said~~ discrete conductive elements protruding therefrom with corresponding contact pads at ~~said~~ the surface of ~~said~~ the at least one interposer, ~~said~~ fabricating including:

placing ~~said~~ the at least one interposer in a first orientation;

determining an envelope defining limits of inner and outer surfaces of ~~said~~ the at least one fence; and

forming at least a portion of ~~said~~ the at least one fence as a series of superimposed, contiguous, mutually adhered layers of material commencing at a defined limit of ~~said~~ the at least one fence.

21. (Currently amended) The method of claim 20, wherein ~~said~~ fabricating further comprises:

inverting ~~said~~ the at least one interposer to a second orientation; and

forming additional portions of ~~said~~ the at least one fence as a series of superimposed, contiguous, mutually adhered layers of material.

22. (Currently amended) The method of claim 21, wherein ~~said~~ forming additional portions comprises adhering ~~said~~ the additional portions to ~~said~~ the at least one fence.

23. (Currently amended) The method of claim 20, wherein ~~said~~ fabricating ~~said~~ the at least one fence includes disposing a portion of ~~said~~ the at least one fence over at least one peripheral edge of ~~said~~ the at least one interposer.

24. (Currently amended) The method of claim 20, wherein ~~said~~ fabricating ~~said~~ the at least one fence comprises fabricating at least one fence having a receptacle configured to progressively guide ~~said~~ the at least one semiconductor device into alignment with ~~said~~ the at least one interposer upon assembly of ~~said~~ the at least one semiconductor device and ~~said~~ the at least one interposer.

25. (Currently amended) The method of claim 20, wherein ~~said~~ at least partially consolidating is effected by directing a focused beam of radiation onto a surface of ~~said~~ selected regions of ~~said~~ a layer.

26. (Currently amended) A method for fabricating an interposer, comprising:
providing at least one interposer; and
fabricating at least one fence configured for placement on a surface of ~~said~~ the at least one interposer, ~~said~~ the at least one fence including a receptacle configured to receive at least one semiconductor device so as to align ~~said~~ discrete conductive elements protruding therefrom with corresponding contact pads at ~~said~~ the surface of ~~said~~ the at least one interposer, ~~said~~ fabricating including:

directing a focused beam of radiation onto a surface of selected regions of
unconsolidated material to at least partially consolidate material in ~~said~~
the selected regions so as to form a first portion of ~~said~~ the at least one
fence; and

repeating ~~said~~ at least partially consolidating at least once to form at least one additional portion of ~~said~~ the at least one fence.

27. (Currently amended) The method of claim 26, wherein ~~said~~ fabricating ~~said~~ the at least one fence includes disposing a portion of ~~said~~ the at least one fence over at least one peripheral edge of ~~said~~ the at least one interposer.

28. (Currently amended) The method of claim 26, wherein ~~said~~ fabricating ~~said~~ the at least one fence comprises fabricating at least one fence having a receptacle configured to progressively guide ~~said~~ the at least one semiconductor device into alignment with ~~said~~ the at least one interposer upon assembly of ~~said~~ the at least one semiconductor device and ~~said~~ the at least one interposer.

29. (Currently amended) The method of claim 26, wherein ~~said~~ fabricating ~~said~~ the at least one fence comprises forming a plurality of superimposed, contiguous, mutually adhered layers comprising at least partially consolidated material.